

IN THE CLAIMS:

✓ Kindly amend claims 1-9 as follows:

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1. (Amended) A mechanical watch comprising:
 - a spring for generating a rotational force;
 - a front wheel train for undergoing rotation in accordance with the rotational force generated by the spring;
 - an escape and governor control mechanism for controlling rotation of the front wheel train, the escape and governor control mechanism having a balance for undergoing reciprocal rotational movement, an escape wheel and pinion for undergoing rotation in accordance with rotation of the front wheel train, and a pallet fork for controlling rotation of the escape wheel and pinion in accordance with reciprocal rotational movement of the balance;
 - a switch mechanism for outputting an ON signal when a rotational angle of the balance exceeds a predetermined threshold value and for outputting an OFF signal when the rotational angle of the balance does not exceed the predetermined threshold value;
 - a balance rotational angle control mechanism for applying a force to the balance to suppress rotation of the balance when the switch mechanism outputs the ON signal; and

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new patent
new claim
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a position detector for detecting a position of the mechanical watch and comprised of a case having a plurality of patterns disposed on an inner surface of the case and a conductive fluid disposed in the case, the operation of the balance rotational angle control mechanism being controlled in accordance with the position of the mechanical watch detected by the position detector.

2. (Amended) A mechanical watch according to claim 1; wherein the case of the position detector has a circular top view and an oval side view.

3. (Amended) A mechanical watch according to claim 1; wherein the case of the position detector has a spherical outer shape; and wherein the patterns are disposed concentrically on the inner surface of the case.

4. (Amended) A mechanical watch according to claim 1; wherein the case of the position detector has a circular top view.

5. (Amended) A mechanical watch according to claim 4; wherein the position detector further comprises an insulating fluid disposed in the case.

6. (Amended) A mechanical watch according to claim 5; wherein the patterns of the position detector are disposed

concentrically around the inner surface of the case in a circular or ring shape.

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7. (Amended) A mechanical watch according to claim 6; further comprising a hair spring disposed in the balance; and wherein the switching mechanism outputs an ON signal when the hair spring contacts a switch lever of the switching mechanism.

8. (Amended) A mechanical watch according to claim 7; wherein the balance rotational angle control mechanism comprises a balance magnet disposed in the balance and coils for applying a magnetic force to the balance magnet when the switching mechanism outputs the ON signal to suppress rotation of the balance and for applying no magnetic force to the balance magnet when the switching mechanism outputs the OFF signal.

9. (Amended) A mechanical watch according to claim 8; wherein the position detector further comprises a plurality of resistors having different resistance values and each corresponding to a conductive state of a respective one of the patterns, one of the resistors being connected to one of the coils in accordance with the position of the mechanical watch detected by the position detector.

Kindly add the following new claims 10-31:

10. A mechanical watch according to claim 1; wherein the position detector further comprises an insulating fluid disposed in the case.
11. A mechanical watch according to claim 1; wherein the patterns of the position detector are disposed concentrically around the inner surface of the case in a circular or ring shape.
12. A mechanical watch according to claim 1; further comprising a hair spring disposed in the balance; and wherein the switching mechanism outputs an ON signal when the hair spring contacts a switch lever of the switching mechanism.
13. A mechanical watch according to claim 1; wherein the balance rotational angle control mechanism comprises a balance magnet disposed in the balance and coils for applying a magnetic force to the balance magnet when the switching mechanism outputs the ON signal to suppress rotation of the balance and for applying no magnetic force to the balance magnet when the switching mechanism outputs the OFF signal.

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14. A mechanical watch according to claim 2;
wherein the position detector further comprises an insulating
fluid disposed in the case.

15. A mechanical watch according to claim 2;
wherein the patterns of the position detector are disposed
concentrically around the inner surface of the case in a
circular or ring shape.

16. A mechanical watch according to claim 2;
further comprising a hair spring disposed in the balance; and
wherein the switching mechanism outputs an ON signal when the
hair spring contacts a switch lever of the switching
mechanism.

17. A mechanical watch according to claim 2;
wherein the balance rotational angle control mechanism
comprises a balance magnet disposed in the balance and coils
for applying a magnetic force to the balance magnet when the
switching mechanism outputs the ON signal to suppress rotation
of the balance and for applying no magnetic force to the
balance magnet when the switching mechanism outputs the OFF
signal.

18. A mechanical watch according to claim 3;
wherein the position detector further comprises an insulating
fluid disposed in the case.

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19. A mechanical watch according to claim 3;
wherein the patterns of the position detector are disposed
concentrically around the inner surface of the case in a
circular or ring shape.

20. A mechanical watch according to claim 3;
further comprising a hair spring disposed in the balance; and
wherein the switching mechanism outputs an ON signal when the
hair spring contacts a switch lever of the switching
mechanism.

21. A mechanical watch according to claim 3;
wherein the balance rotational angle control mechanism
comprises a balance magnet disposed in the balance and coils
for applying a magnetic force to the balance magnet when the
switching mechanism outputs the ON signal to suppress rotation
of the balance and for applying no magnetic force to the
balance magnet when the switching mechanism outputs the OFF
signal.

22. A mechanical watch according to claim 4;
wherein the patterns of the position detector are disposed
concentrically around the inner surface of the case in a
circular or ring shape.

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23. A mechanical watch according to claim 4;
further comprising a hair spring disposed in the balance; and
wherein the switching mechanism outputs an ON signal when the
hair spring contacts a switch lever of the switching
mechanism.

24. A mechanical watch according to claim 4;
wherein the balance rotational angle control mechanism
comprises a balance magnet disposed in the balance and coils
for applying a magnetic force to the balance magnet when the
switching mechanism outputs the ON signal to suppress rotation
of the balance and for applying no magnetic force to the
balance magnet when the switching mechanism outputs the OFF
signal.

25. A mechanical watch according to claim 5;
further comprising a hair spring disposed in the balance; and
wherein the switching mechanism outputs an ON signal when the
hair spring contacts a switch lever of the switching
mechanism.

26. A mechanical watch according to claim 5;
wherein the balance rotational angle control mechanism
comprises a balance magnet disposed in the balance and coils
for applying a magnetic force to the balance magnet when the
switching mechanism outputs the ON signal to suppress rotation

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of the balance and for applying no magnetic force to the balance magnet when the switching mechanism outputs the OFF signal.

27. A mechanical watch according to claim 6; wherein the balance rotational angle control mechanism comprises a balance magnet disposed in the balance and coils for applying a magnetic force to the balance magnet when the switching mechanism outputs the ON signal to suppress rotation of the balance and for applying no magnetic force to the balance magnet when the switching mechanism outputs the OFF signal.

28. A mechanical watch comprising: a front wheel train mounted to undergo rotation; a control mechanism for controlling rotation of the front wheel train and having a balance for undergoing reciprocal rotational movement; a switch mechanism for outputting an ON signal when a rotational angle of the balance exceeds a predetermined threshold angle and for outputting an OFF signal when the rotational angle of the balance does not exceed the threshold angle; a balance rotational angle control mechanism for applying a force to the balance to suppress rotation of the balance when the switch mechanism outputs the ON signal; and a position detector for detecting a position of the mechanical watch and comprised of

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a case having a plurality of patterns disposed on an inner surface of the case and a conductive fluid disposed in the case, the operation of the balance rotational angle control mechanism being controlled in accordance with the position of the mechanical watch detected by the position detector.

29. A mechanical watch according to claim 28; wherein the case of the position detector has a circular top view and an oval side view.

30. A mechanical watch according to claim 28; wherein the case of the position detector has a spherical outer shape; and wherein the patterns are disposed concentrically on the inner surface of the case.

31. A mechanical watch according to claim 28; wherein the patterns of the position detector are disposed concentrically around the inner surface of the case in a circular or ring shape.

IN THE ABSTRACT:

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Delete the abstract now of record and insert therefor the new abstract submitted herewith on a separate sheet.